

The Biggest Threat to National Security



CONGRESSMAN STEVE ISRAEL'S NEXT GENERATION ENERGY SECURITY INITIATIVE



"We choose to go to the moon in this decade and do the other things, not because they are easy, but because they

are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too."

- President John F. Kennedy, September 12, 1962



"I refuse – and you should refuse – to be the first generation of Americans in our history to say 'it's too hard' when it comes to the safety and security of our children."

Congressman Steve Israel

Dear Friend:

I'm pleased to share with you my "Next Generation Energy Security Plan."

My plan is based on three pillars.

FIRST, ENERGY IS A NATIONAL SECURITY ISSUE.

As a Member of the House Armed Services Committee, I have a solemn responsibility to ensure that we have the means to prevent and respond to military flashpoints. The fact is that every military challenge we face is either derived from or impacted by one thing: our reliance on fossil fuels and foreign energy sources:

- Iran As Iran attempts to develop nuclear weapons, all of our potential responses diplomacy, economic tools, military force are impacted by the fact that Iran is the fourth largest exporter of crude oil in the world and will use that leverage in every way possible. 90% of Persian Gulf oil and 25% of global oil supplies move through Straits of Hormuz.
- China China is now the world's fastest growing economy. According to the Congressional Budget Office, 30 percent of the growth in worldwide oil demand in 2004 came from China alone. By the year 2030, if the current pattern continues, China is likely to have more vehicles than the United States. Beijing's voracious appetite for energy creates a strong competition with the United States for new sources of oil.
- Global terrorism Terrorist recruiters exploit conditions of poverty, disease, oppression, environmental degradation and a scarcity of resources. And global warming the result of carbon emissions helps create, expand and deepen those conditions.
- Defense budgets In order to address these and other military challenges, I believe we must have a strong and smart military. But that is becoming unsustainable in the face of growing energy costs. Last year, the Pentagon spent \$10.6 billion on basic energy costs. Of that, the Air Force spent \$4.7 billion, nearly half, on one thing: oil for its planes. With an \$8 trillion debt, we must borrow money from China to fund our military to buy oil from unstable Persian Gulf countries to fly Air Force planes to protect us from China and unstable Persian Gulf countries. That is not simply an absurdity; it is a vulnerability.

"In the weeks after 9-11, I was on the Floor of the House when President Bush spoke about how we would respond to this grave new challenge. I was hoping he would say, 'By the end of the decade, we will have SUVs that get forty miles per gallon.' He didn't."

SECOND, HISTORY PROVES THAT WE CAN MEET THIS CHALLENGE.

Whenever our nation has faced critical threats, we mobilized, manufactured, engineered, researched, developed and invested in the human and technical resources necessary to meet and master those challenges.

In fact, Long Island has always been at the very center of those efforts.

Going into World War II, we transformed our national and regional economy to create and deploy the technologies necessary to defeat Nazism and fascism. And in 1957, when the Soviet Union beat us to space and their Sputnik orbited above us, we transformed again, this time involving our schools: we made college more affordable, we helped our schools expand math and science education, we invested in human capital that worked in the aerospace industry and ultimately defeated the most enormous hurdle: the seemingly endless expanse of space.

THIRD, A TRULY MEANINGFUL ENERGY TRANSFORMATION MUST BE BASED ON SUPPLY AND DEMAND.

In 1960 – three years after the Soviets launched Sputnik – President Kennedy said, "By the end of the decade we will land on the moon." And we did.

Ask most people which entity landed Americans on the moon and they will reply, "NASA". In my view, NASA didn't land Americans on the moon – Grumman did! But NASA and the federal government were critical catalysts, providing the financial incentives that unleashed the ingenuity of Grumman's workforce. Similarly, a "man-on-the-moon" energy program can't expect the private sector to plunge into limitless risk and potential bankruptcy. We cannot regulate that the private sector develop breakthrough technologies. We can help foster some assurance of demand for those technologies.

My Next Generation Energy Security Initiative spurs advanced energy by incentivizing new markets and new supplies – creating the next generation of new jobs.

Ultimately, the Next Generation Energy Security Initiative relies on our historic strengths to secure our future. It is a bold departure from the missteps, half-steps, and back-steps that have characterized U.S. energy policy for the last thirty years.



"Our reliance on fossil fuels and foreign sources of energy are as grave and great as all of the dangers and challenges we mastered before. It is time to do what America has always done: make the choices and investments necessary to protect our children."

Too often, I hear excuses for why we can't do better:

- "It's too expensive."
- "The technology isn't feasible."
- "It's too hard. Too impractical."

<u>I refuse – and you should refuse – to be the first generation of Americans in our history to say "it's too hard" when it comes to the safety and security of our children.</u>

I can't imagine George Washington, standing right here in New York in August 1776, surrounded by the British Navy – the most powerful military on earth at the time – and sending a note to the Continental Congress that "it's too hard, let's give up."

I can't imagine Abraham Lincoln, faced with a fatal threat to our national survival and purpose, telling his generals, "It's too tough, let's give in."

And I can't imagine President Kennedy, in a post-Sputnik era, saying to the American people, "I didn't know the technology was so infeasible. So instead of sending a man to the moon, I'm gong to send a guy to Des Moines."

Our reliance on fossil fuels and foreign sources of energy are as grave and great as all of the dangers and challenges we mastered before. It is time to do what America has always done: make the choices and investments necessary to protect our children.

The development of industry and schools after World War II that landed a man on the moon was accomplished by a group of people we now call "The Greatest Generation."

Today, faced with similar threats and critical opportunities, it falls on us to accept that legacy.

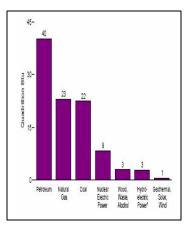
That is what my "Next Generation Energy Security Plan" does. It reverses the missteps and half-steps of 30 years and replaces them with one giant leap for humankind.

Please let me know your thoughts on this issue. And visit my website at www.house.gov/israel for continued updates.

Sincerely,

STEVE ISRAEL Member of Congress

KEY STATISTICS



Energy Consumption by Source (Energy Information Administration 2004)

DEMAND:

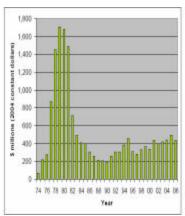
- The U.S. uses 20 million barrels of oil a day. 60% (13 million barrels) is imported. 45% comes from OPEC.
- U.S. Consumption Of Energy Sources:
 - 86% Fossil Fuels (40% oil, 23% natural gas, 23% coal)
 - 8% Nuclear
 - 6% Renewable (biomass, hydro-electric, geothermal, wind, solar)
- US Renewable Energy Consumption:
 - 47% biomass
 - 45% hydro-electric
 - 6% geothermal
 - 2% wind
 - 1% solar
- 40% of U.S. total energy consumption is for residential and commercial buildings; 28% is for transportation.

 Transportation accounts for 98% of U.S. oil consumption.
- The U.S. consumes 25% of world oil and has 3% of world oil reserves.
- Worldwide oil demand has increased by 7 million barrels a day since 2000.
- The typical refuse truck gets 2.8 miles per gallon, and consumes 8,000 gallons of fuel a year.
- By 2030, global demand for fossil fuels will increase 50% and will constitute 80% of world energy supplies.
- Since 2000, 30% of total world-wide growth in oil demand has come from one country: China.
- By 2010, China may have 30 million cars on its road. By 2030, China could have more cars on their roads that the U.S.
- ► 60% of China's oil imports come from the Middle East.
- Last year, for the first time ever, Asia's oil consumption exceeded North America's.
- Rising fuel prices pushed the Postal Service's 2006 transportation costs up to \$1.7 billion (\$260 million more than anticipated). The US Post Office uses 1.6 million gallons of gasoline, diesel fuel and jet fuel daily. Every 1-cent increase in gas prices costs the Postal Service \$8 million annually.

SUPPLY:

- U.S. Oil Imports From Foreign Sources (barrels per day)
 - Persian Gulf: 2.3 million (including 1.3 million from Saudi Arabia; the rest from Iran, Iraq, Bahrain, Kuwait, and the UAE.)
 - Canada: 1.6 million
 - Mexico 1.6 million
 - Venezuela: 1.5 million
 - Nigeria: 1.1 million
- In 2004, Persian Gulf countries produced 30% of the world's oil and held 57% of world reserves.
- Iran exports 2.4 million barrels of oil a day, generating \$4 billion revenues a month. Syria exports 200,000 barrels of oil a day.

KEY STATISTICS (cont.)



Department of Energy Renewables R&D Spending (1974-2006)

(DOE Budget Authority History Table)

DEFENSE:

- The Department of Defense represents 97% of all U.S. government fuel consumption; the military consumes 350,000 barrels of petroleum-based fuels a day.
- Last year, the Pentagon spent \$10.6 billion (\$29 million per day) on basic energy. Of that, the Air Force spent \$4.7 billion on one thing: fuel for its airplanes.
- The Air Force consumes 52% of all fossil fuel used by the federal government; the costs exceed \$10 million/day.
- Every \$10 per barrel increase in oil adds \$600 million to the Department of Defense budget.
- An F-16 burns 28 gallons of fuel per minute when its afterburners are lit.
- A Stryker Combat Vehicle in Iraq gets 5 to 10 MPG.
- 90% of all Persian Gulf oil and 25% of the world's oil moves through the Straits of Hormuz.
- Total Department of Defense energy research in 2006 was \$595 million. The Air Force alone spent nearly ten times that amount for jet fuel.

INVESTMENT & GLOBAL COMPETITION:

- Only one of the top 10 wind turbine manufacturers in the world is American owned.
- The U.S. lags behind Germany and Japan in solar power.
- Seven out of 10 new cars in Brazil are fuel-flexible.
- U.S. Renewable energy R&D has declined between 2% and 10% every year since 1980.
- Denmark, which imported oil and gas in the 1990s, has increased its renewable energy production by 250 percent and now exports energy – all while cutting its carbon dioxide emissions.

CONSERVATION:

- 45 million U.S. homes are under-insulated. Fixing this problem would reduce our residential electrical use 17%.
- 50% of Americans drive less than 20 miles each day. The combination of plug-in hybrids and fuel-flexible technologies could stretch each gallon of gasoline to 500 miles nationally.

COSTS:

- Household energy costs will average \$4,500 this year: \$500 over 2004 and \$900 over 2003.
- Exxon Mobil posted a 1st quarter profit of \$8.4 billion. Its Chairman was paid \$686 million from 1993-2005. The energy bill signed by the President gave oil companies \$2 billion in tax cuts.

HEALTH & THE ENVIRONMENT:

- To avoid dangerous climate change, scientists argue we must cut greenhouse gas emissions by 50 70% by 2050.
- The American Lung Association reports that about 42.5 million Americans live in counties with unhealthy levels of ozone and particulate pollution.
- More than 14 million New Yorkers live in areas where air quality is classified as unhealthy by the U.S. Environmental Protection Agency.





Source: www.eereweb.ee.doe.gov

"Instead of passing an energy bill that gave a \$2 billion tax cut to the richest oil companies on earth, we should be providing greater tax incentives for American families to invest in new energy technologies, and renewable-A compani expara. heir markets.

THE NEXT GENERATION ENERGY SECURITY PLAN

1-Targeted Tax Incentives to Spur Job-Creating Investments and Help Americans Purchase Energy Efficient Technologies.

On July 28, 2005 the House passed an energy bill that provided \$2 billion in tax breaks to the very oil companies that had just reported their highest profits in history. Instead, Washington should be focusing on new, long-range and sustainable tax incentives to help industry research, develop, and manufacture a diverse portfolio of renewable energy technologies, such as:

- Increasing the length of investment and production tax credits that now elapse before a significant project can be completed.
- Credits for the retail sale of alternative motor fuels and the installation of alternative fueling stations.
- Credits for the construction of energy efficient new homes.
- Providing Detroit new incentives to manufacture plug-in hybrid, fuel flexible, hydrogen and other alternative automotive technologies. I support a plan developed in consultation with the United Auto Workers that requires that at least 30% of automobiles manufactured for sale in the U.S. are advanced technology vehicles by 2011. In return, auto manufacturers receive a 35% investment tax credit against their investment in these advanced technologies or comparable assistance with retiree health costs.
- Providing new and expanded research, development, and manufacturing tax incentives to encourage research, development and deployment of renewable energy resources and infrastructure such as solar, wind, hydrogen, hydropower, biomass and geothermal.
- Extend and expand the Clean Renewable Energy Bond (CREB) program for electric cooperatives and public power systems.
- Fully funding the renewable energy, energy efficiency and vehicle technology programs authorized by H.R. 6, the *Energy Policy Act of 2005*, for the next ten years, including grant programs for consumers who buy energy efficient appliances, the establishment of a sugarcane ethanol pilot program and a grant program for new or retrofitted school buses. These programs were authorized but, based on the President's budget request, will likely be under-funded or not funded at all.
- Providing up to a \$2,500 annual credit for families to purchase energy efficient technologies. 45 million American homes are under-insulated. Fixing this problem would reduce the U.S. residential sector's electricity use by roughly 17 percent. Not only would this enhance our national security and reduce energy costs for working families, but it would create jobs in manufacturing and technology by creating increased demand for energy efficient products. Additionally, I support allowing for a 100% tax deduction for all finance and interest costs associated with clean energy and energy efficient purchases.

"To help protect our national security, we created the Defense Advanced Research Projects Agency to provide capital to businesses to develop new weapons systems. Why don't we have an Energy Advanced Research Programs Agency to help develop new energy security technologies?"

THE NEXT GENERATION ENERGY SECURITY PLAN

2- Expanding New Investments by Catalyzing New Markets

Let's face it: no matter how visionary a technology may be or what benefit it may provide to the world, it still depends on two things: supply and demand. Somewhere between the two is the right interaction of risk, capital and reliable markets. When it has come to meeting certain critical national security needs, the federal government has acted as a catalyst to help incentivize investments and reduce risk.

For example, NASA did not land man on the moon. Grumman did. But NASA acted as the catalyst for the private-sector research, development and manufacturing that ultimately won the space race. Today, we need a NASA-equivalent dedicated to clean energy technologies.

Here's another example: we created the Defense Advanced Research Projects Agency in the Pentagon. DARPA provides critical funding to academic institutions and companies to research and develop highly advanced and specialized weapons systems. Why? Because those companies couldn't bear the risk of investing alone in technologies so advanced that they might be unprofitable or fail to find sufficient markets.

- I have cosponsored legislation to create an Energy Advanced Research Projects Agency to fund R & D in commercially risky, but promising new energy technologies. The Department of Defense funded the development of the Boeing 707. Now it should support new technologies that will reduce F-16 fuel consumption to less than 28 gallons a minute.
- I am introducing legislation requiring the federal government to purchase 50,000 plug-in hybrid vehicles. This would give Detroit the assurance of a sustained market and incentivize investment in and production of new technologies.
- To help generate the capital to pay for the military buildup that won World War II, Washington authorized "War Bonds." I have introduced legislation to issue a new series of Energy Freedom bonds. The proceeds would be earmarked specifically for federal grants and investments in clean energy technology research, development and production.



Rep. Israel is joined by Babylon Town Councilwoman McVeety, Town Supervisor Ballone and County Executive Steve Levy at a press conference announcing Israel's "Clean Energy Bond Act."

"Energy is a national security issue, but Washington has been AWOL. Meanwhile, local governments are doing their part by buying hybrid busses and retrofitting their **buildings** imagin President Rooseve aware of threat in Mild War II, waitte for the Town of Babylon Public Safety Department to invade Normandy and free Europe?"

THE NEXT GENERATION ENERGY SECURITY PLAN

3- A New Federal Partnership with Local Governments

School districts and local governments are major energy users, and that is driving up local taxes. One key factor in rising budgets is the increased costs to put fuel in gas-guzzling busses and heat cavernous antiquated schools and public buildings.

According to Babylon Superintendent of Schools Dr. William Bernhard, energy costs for his small school district, which includes only three buildings, are rapidly approaching \$1 million per year.

Many local governments are working hard to reduce energy costs, lower taxes, and improve their environments. But it is ludicrous for them to do this in the absence of a federal partner. That's why I've cosponsored legislation that would create a grant program to improve mass transit systems.

I have also introduced two bills that would incentivize local governments to strengthen their clean energy programs.

- When I was a Huntington Town Councilman, my town passed an Open Space Bond Act to acquire sensitive properties and help protect our environment. Learning from that experience, I've introduced legislation in Congress, the "Clean Energy Local Bond Act," to provide \$50 million over five years to qualified school districts and local governments that pass bond acts to purchase, retrofit or install energy efficient equipment; convert vehicle fleets to alterative fuels, and more.
- The "Clean Energy Partnership Act" would make school districts and local governments eligible for a twenty percent match of the costs of adopting "Clean Energy Action Plans," including the installation of renewable technologies in public buildings, retrofitting facilities, converting or upgrading fleets to alternative fuels, or implementing conservation measures.



The NYIT/USMMA solarhydrogen house at the International Solar Decathlon

"We need a
Sputnik-style
commitment to
help schools grow
a generation of
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moon; they just
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that get bet
mileage

THE NEXT GENERATION ENERGY SECURITY PLAN

4- Rebuilding Our Intellectual Arsenal

After the former Soviet Union beat us into outer space and orbited their Sputnik satellite above us, the United States came to a startling recognition. We would not reach the moon simply by manufacturing the right rockets; we had to reach into our schools to develop the right skill sets. The federal government focused on expanding math and science programs and curricula were changed. Many federal college assistance programs in place today were created to expand access to post-secondary education in response to Sputnik. We invested in growing a new generation of Americans who could win the "Space Race."

Today, we are in a new race: for the energy sources and technologies that will sustain our security, our economy and our environment. We need a new "Sputnik" initiative that grows a generation of Americans who can pioneer new technologies.

They don't have to invent new rockets to land on the moon. They just need to develop a way for SUVs to get from one end of the Long Island Expressway to the other at forty miles to the gallon.

I am pursuing a variety of ideas to expand innovation when it comes to energy security technologies:

- Expand National Science Foundation funding for Centers for Excellence in Alternative Energies, partnering federal laboratories, universities and businesses.
- Double funding for the National Renewable Energy Laboratory, the nation's primary laboratory for renewable energy and energy efficiency research and development.
- Invest in new school-business partnerships that provide high school students with opportunities to work with alternative energy companies.
- Facilitate Research Triangles on renewable energy with universities, small business incubators and local businesses.

"What could be more dysfunctional than borrowing money from China to fund defense budgets that pay Persian Gulf states for oil to power our military to defend us from China and Persian Gulf instability?"



5 - Paying for the Plan

The best ideas are rhetoric unless you know two things: how much they will cost and how we will pay for them.

The cost of my "Next Generation Energy Security Plan" is approximately \$210 billion over ten years. Sound like a lot?

- We've spent at least that amount over the past three years in direct costs in Iraq.
- We'll spend twice that much this year alone on the Pentagon budget.
- We'll pay at least that amount in the next six months just on interest on the soaring federal debt.
- We'll spend triple that amount on the Medicare Part D Program.

Meanwhile, the cost of our timid energy policies will be catastrophic. What could be more dysfunctional than borrowing money from China to fund defense budgets that pay Persian Gulf states for oil to power our military to defend us from China and Persian Gulf instability?

Some have proposed a tax on gas to disincentivize driving and create revenues for a major renewable energy program. But that would hit working families disproportionately hard, particularly on Long Island which lacks the public transportation options to avoid car travel.

Instead of asking those families to make an unfair sacrifice, my Next Generation Energy Plan asks for a patriotic investment by others. By asking only the wealthiest 1 percent of Americans to forgo just the income tax cuts scheduled for between 2007 and 2010, we would save approximately \$250 billion.

That \$286 billion would fund the entirety of my Next Generation Energy Plan – and most of that would be invested back in the private sector companies that are researching and manufacturing alternative energy technologies and the taxpayers that purchase them. That creates a new generation of jobs for working families, and a new source of wealth for the owners and stockholders of these companies.

It strengthens our economy and our military security all at the same time.





Rep. Israel views a hydrogen car alongside SUNY Farmingdale President Jonathan Gibralter and Professor Hazem Tawfik

THE NEXT GENERATION ENERGY SECURITY PLAN

JOIN REP. ISRAEL'S ENERGY SECURITY CONGRESSIONAL TASK FORCE

As a Member of the House Armed Services Committee, I am focusing my efforts to reduce our reliance on foreign oil—not just as an economic and environmental priority, but due to national security urgency.

And not just in Washington, but on Long Island.

That is why I have formed a local **Energy Security Congressional Task Force**. Its members are drawn from a broad range of organizations, schools, advocacy groups and businesses throughout New York's Second Congressional District. We may not agree on everything, but our Task Force advises me on the following:

- National energy issues and legislative initiatives as they arise
- **Town Meetings** on energy issues
- Federal Grants Workshops to help local governments and businesses identify federal funding opportunities in the area of energy technologies and conservation
- Industry Roundtables and Congressional Forums on energy security technologies, policies and more

| Dear Congressman Israel: |
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| [] I am interested in joining your Energy Security Task Force.[] Please send me email updates on energy issues.[] I'd like you to speak to my business or organization. |
| NAME: |
| ADDRESS: |
| CITY: ZIP: |
| DAYTIME PHONE NUMBER: OTHER PHONE: |
| EMAIL ADDRESS: |
| Please return to: Rep. Steve Israel, 150 Motor Parkway, Suite 108, Hauppauge, NY, 11788, or fax to Harris Wiener at (631) 951-3308. |